Moving
Rehabilitation
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Hydrocollator®

HEATING UNITS

User Manual

120 - Volt Units

SS E-1 E-2

M-2 SS-2 M-4

CHATTANOOGA GROUP

ISO 13485 CERTIFIED

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Comet® of Prestige Brands, Inc.

Soft Scrub® of the Dial Corporation

Scotch-Brite™ of 3M

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FOREWORD

This manual contains general instructions for operation, precautionary instructions, and maintenance recommendations for the owners and operators of the Hydrocollator SS, SS-2, E-1, E-2, M-2, and M-4 Heating Units. In order to obtain maximum life and efficiency of the Hydrocollator Heating Units, please read this manual thoroughly and follow all instructions prior to operating the unit.

Specifications put forth in this manual were in effect at the time of publication. However, owing to Chattanooga Group's policy of continual improvement, changes to these specifications may be made at any time without obligation on the part of Chattanooga Group.

SAFETY PRECAUTIONS

Precautionary Definitions

The precautionary instructions found in this section and throughout this manual are indicated by specific symbols. Understand these symbols and their definitions before operating this equipment. The definitions of these symbols are as follows:

= **CAUTIONS** - Text with a "CAUTION" indicator explains possible safety infractions that could have the potential to cause minor to moderate injury or damage to equipment.

= **WARNINGS -** Text with a "WARNING" indicator explains possible safety infractions that will potentially cause serious injury and equipment damage.

= **DANGERS** - Text with a "DANGER" indicator explains possible safety infractions that are imminently hazardous situations that would result in death or serious injury.

NOTE: Throughout this manual, "**NOTE**" may be found. These notes are helpful information to aid in the particular area or function being described.

⚠ CAUTION

- Read, understand, and practice the precautionary and operating instructions. Know the limitations associated with the Hydrocollator SS, SS-2, E-1, E-2, M-2, and M-4 Heating Units. Observe the cautionary and operational decals installed on the unit.
- DO NOT operate this unit in an environment where other devices are being used that intentionally radiates electromagnetic energy in an unshielded manner. Portable and mobile RF communications equipment can affect Medical Electrical Equipment.
- The Hydrocollator Heating Unit generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to other devices in the vicinity. However, there is no guarantee that interference will not occur in a particular installation. Harmful interference to other devices can be determined by turning the Hydrocollator Heating Unit on and off. Try to correct the interference using one or more of the following: reorient or relocate the receiving device, increase the separation between the equipment, connect the equipment to an outlet on a different circuit from that which the other device(s) are connected and consult the Chattanooga Group Service Department for help.
- Do not use accessories other than those supplied with the Hydrocollator Heating Unit or recommended by Chattanooga Group. The safety of other products has not been established, and their use could result in injury to the patient.
- Never adjust the thermostat too high. The thermostat is extremely sensitive and the slightest adjustment will alter the temperature several degrees. The recommended operating temperature is 160° F to 165° F (71° to 74° C). The temperature of the water should be checked with a thermometer after every adjustment, before using the HotPac. Always allow sufficient time for the water temperature to stabilize.
- The Hydrocollator Heating Unit should not be installed above a surface that is susceptible to casual water damage.
- Always keep the water level over the top of the HotPacs to avoid burning or scorching of the packs.
- Never allow the HotPac to dry after use.
- Check water level daily as it has a natural loss due to evaporation.
- Clean the tank as described in the maintenance portion of this manual.
- Check unit periodically for signs of leaking and contact service if leaks are noted.
- Always replace Hydrocollator HotPacs as soon as they show signs of wear.
- If the unit is to be left unattended for a period of time, unplug the unit, remove the packs, empty the water, and clean the tank.
- Do not move the Hydrocollator Heating Unit while filled with heated water. Tipping over could result in burns to the user or others.
- Always unplug the Hydrocollator Heating Unit from the power source before attempting to empty water from unit.
- Always use factory authorized replacement parts.
- Always destroy and replace HotPacs which are exposed to contamination: hazardous or cleaning materials, bodily fluids, mold, etc.
- This unit should be operated, transported, and stored in temperatures between 0° F and 140° F (-18° C and 60° C) and atmospheric pressure range between 50 kPa - 160 kPa, with relative humidity ranging from 10% - 100%.
- Treatment time should not exceed 30 minutes.
- DO NOT retrieve HotPacs from tank or replace HotPacs in tank with unprotected hand.
- Avoid direct contact with mounting rack in tank.
- Always wrap HotPac with towel or terry cover before handling or applying to patient.
- Constantly monitor HotPac application to ensure that the skin is not becoming too hot.
- Damage to skin can occur from exposure to extreme heat or cold. Note instructions for proper use.
- DO NOT apply over insensitive skin or in the presence of poor circulation.
- Never lay or sit on top of the HotPac.
- DO NOT use HotPac directly over cuts, abrasions or wounds.
- Consult health care professional before using HotPacs on non-communicative individuals.
- Exercise extreme caution when using HotPacs on non-communicative individuals.

WARNING

- ***Grounding the Hydrocollator SS, SS-2, E-1, E-2, M-2, and M-4 Heating Units:*** Make certain the unit is electrically grounded by plugging into a hospital grade electrical outlet with a ground terminal receptacle (U-ground outlet). Follow the National Electrical Code.
- The water temperature in the Hydrocollator Heating Unit is approximately 60° F (71° C), and the water scalding temperature is approximately 120° F (49° C).
- Care must be taken when operating the Hydrocollator Heating Unit adjacent to or stacked with other equipment. Potential electromagnetic or other interference could occur to this or other equipment. Try to minimize this interference by not using other equipment in conjunction with it.

  The Hydrocollator Heating Unit should be placed on a smooth, level surface. The surface should support up to the Filled Weight (weight of heating unit filled with water) found in the Technical Specifications pages 8-10 of this manual.
- Use only accessories that are specially designed for the Hydrocollator Heating Unit. Do not use accessories manufactured by other companies on the Hydrocollator Heating Unit. Chattanooga Group is not responsible for any consequence resulting from using products manufactured by other companies. The use of other accessories or cables may result in increased emissions or decreased immunity of the Hydrocollator Heating Unit.
- Periodically inspect unit for signs of damage and pitting during regular cleaning intervals, as described in maintenance portion of this manual. Contact service if any signs of damage are discovered.
- DO NOT apply HotPac directly to skin.
- Individuals with circulatory problems should consult with a physician before using this product.
- DO NOT sit or lie on the HotPac.
- DO NOT add chlorine additive to water.
- DO NOT allow HotPac to come in contact with hydrocarbons (e.g., Comet®, Soft Scrub®, etc.).

Risk of explosion if used in the presence of flammable anesthetics.

Description of Device Markings

ATTENTION: Refer to Instruction Manual/Booklet

Type B equipment

Thermostat Intensity Control

WHITE LAMP, when illuminated, indicates that main power is connected, the switch is on and unit is operating.

RED LAMP (M-4 units), when illuminated, warns of an overheat/low water condition. Action is necessary to correct the condition.

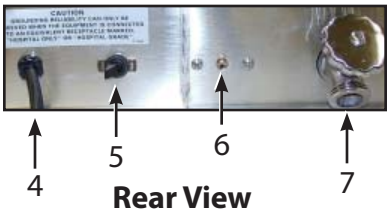
IMPORTANT: Some models (M-4 units) are fitted with a thermal cut-out thermostat which acts as a "non self-resetting" thermal cut-out. In the unlikely event of a fault condition, this device is designed to open the power circuit between 190° F ± 14° F (88° C ± 8° C). It is not possible to alter its operating range. The operation of the unit may be restored by depressing the red button after the water/element temperatures have been allowed to cool. If the fault condition persists, please contact Chattanooga Group or an authorized agent.

NOMENCLATURE

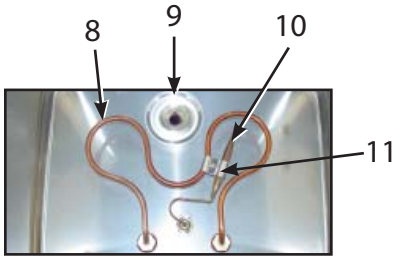
Diagram

1. Lid
2. Lid Rod
3. Pilot Lamp, Clear
4. Power Cord
5. On/Off Switch
6. Thermostat Intensity Control
7. Drain Valve
8. Heating Element
9. Drain
10. Hydraulic Thermostat
11. Bracket (Bracket & Bulb Thermostat A/B Assembly)
12. Internal Wiring Harness
13. Drain, Copper Tube

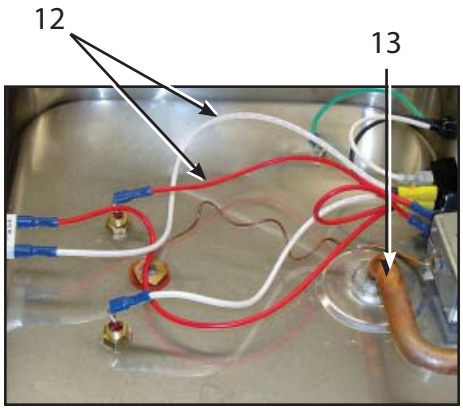
E-2 Model



Rear View



Inside View



Underneath View
(J-Box Cover Removed)

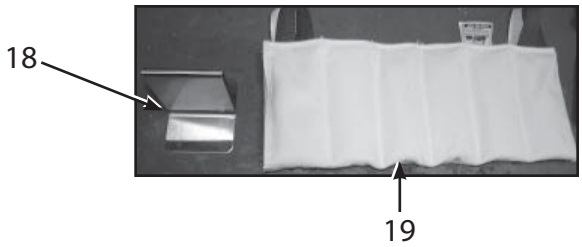
E-1 Rear View

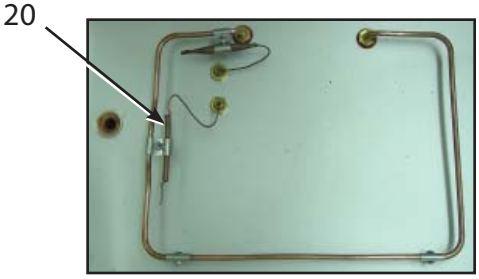
NOTE: E-2 and E-1 models shown above; models will vary. Nomenclature also applies to SS, SS-2, M-2 and M-4 models.

Diagram (CONTINUED)

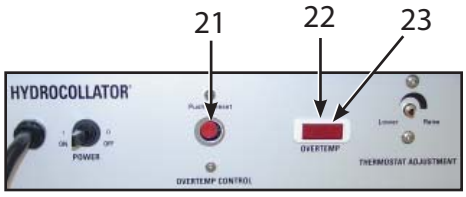
14. Lid Knob/Handle
15. Lid Rod Nuts
16. Side Handle
17. Casters, 3-inch
18. Neck Pak Insert
19. HotPac
20. Overtemp Thermostat*
21. Overtemp Reset Button*
22. Overtemp Light Cover*
23. Pilot Lamp, Red*
24. Junction Box (J-Box) Cover

M-4 Model





Inside View



Rear View

<u>Not illustrated</u>:

25. Stainless Steel Wire Rack
26. Drain, Hose, Bib
27. Replacement Tank
28. Outer Jacket
29. Water Thief
30. Plastic Feet
31. Hose, Drain
32. Drain, Copper, Part B (SS only)
33. Bracket, Element Support

NOTE: M-4 model shown above; models will vary. Nomenclature also applies to E-1, E-2, SS, SS-2, and M-2 models.

* M-4 units only

TECHNICAL SPECIFICATIONS

SS Model

Power Supply	110-120 V~
Rated Frequency	50 Hz
Power Consumption	1000 W
Tank Capacity	31.64 Liters
Filled Weight	56 kg (120 lbs)
Temperature Range	160° F - 165° F (71° C - 74° C)
Thermal Cut-out Temp	190° F ± 14° F (88° C ± 8° C)
Heating Up Time	Time to 160° F (70° C) - 3 Hours
Cool Down Time	Time from 160° F (70° C) - 2 Hours
Safety Class	Type B
Safety Tests	UL 544
Dimensions	20 in H x 18 in L x 16 in W (51 cm H x 46 cm L x 41 cm W)
Product Weight	51 lbs (23.1 kg)
Shipping Weight	54 lbs (24.5 kg)

Standard Accessories: Includes eight Standard size HotPacs.

SS-2 Model

Power Supply	110-120 V
Rated Frequency	60 Hz
Power Consumption	1000 W
Tank Capacity	49.32 Liters
Filled Weight	85 kg (140 lbs)
Temperature Range	160° F - 165° F (71° C - 74° C)
Thermal Cut-out Temp	190° F ± 14° F (88° C ± 8° C)
Heating Up Time	Time to 160° F (70° C) - 4 Hours
Cool Down Time	Time from 160° F (70° C) - 2 Hours
Safety Class	Type B
Safety Tests	UL 544
Dimensions	33 in H x 21 in L x 16 in W (85 cm H x 52 cm L x 39 cm W)
Product Weight	68 lbs (30.8 kg)
Shipping Weight	74 lbs (33.6 kg)

Standard Accessories: Includes eight Standard size HotPacs.

TECHNICAL SPECIFICATIONS

E-1 Model

Power Supply	110-120 V~
Rated Frequency	50 Hz
Power Consumption	1000 W
Tank Capacity	15.44 Liters
Filled Weight	25 kg (55 lbs)
Temperature Range	160° F - 165° F (71° C - 74° C)
Thermal Cut-out Temp	190° F ± 14° F (88° C ± 8° C)
Heating Up Time	Time to 160° F (70° C) - 2 Hours
Cool Down Time	Time from 160° F (70° C) - 1 Hour
Safety Class	Type B
Safety Tests	UL 544
Dimensions	16 in H x 13 in L x 8 in W (41 cm H x 33 cm L x 20 cm W)
Product Weight	14 lbs (6.4 kg)
Shipping Weight	16 lbs (7.3)

Standard Accessories: Includes four Standard size HotPacs.

E-2 Model

Power Supply	110-120 V~
Rated Frequency	50 Hz
Power Consumption	1000 W
Tank Capacity	43.23 Liters
Filled Weight	60 kg (125 lbs)
Temperature Range	160° F - 165° F (71° C - 74° C)
Thermal Cut-Out Temp	190° F ± 14° F (88° C ± 8° C)
Heat Up Time	Time to 160° F (70° C) - 4 Hours
Cool Down Time	Time from 160° F (70° C) - 2 Hours
Safety Class	Type B
Safety Tests	UL 544
Dimensions	20 in H x 15 in L x 13 in W (51 cm H x 38 cm L x 33 cm W)
Product Weight	31 lbs (14.1 kg)
Shipping Weight	35 lbs (15.9 kg)

Standard Accessories: Includes two Oversize HotPacs, three Standard size HotPacs and 1 Neck Contour HotPac.

M-2 Model

Power Supply	110-120 V~
Rated Frequency	60 Hz
Power Consumption	1000 W
Tank Capacity	68.81 Liters
Filled Weight	110 kg (190 lbs)
Temperature Range	160° F - 165° F (71° C - 74° C)
Thermal Cut-Out Temp	190° F ± 14° F (88° C ± 8° C)
Heat Up Time	Time to 160° F (70° C) - 6 Hours
Cool Down Time	Time from 160° F (70° C) - 3 Hours
Safety Class	Type B
Safety Tests	UL 544
Dimensions	33 in H x 27 in L x 16 in W (85 cm H x 67 cm L x 40 cm W)
Product Weight	86 lbs (39 kg)
Shipping Weight	93 lbs (42.2 kg)

Standard Accessories: Includes twelve Standard size HotPacs.

M-4 Model

Power Supply	110-120 V~
Rated Frequency	60 Hz
Power Consumption	1500 W
Tank Capacity	135.76 Liters
Filled Weight	200 kg (340 lbs)
Temperature Range	160° F - 165° F (71° C - 74° C)
Thermal Cut-out Temp	190° F ± 14° F (88° C ± 8° C)
Heating Up Time	Time to 160° F (70° C) - 8 Hours
Cool Down Time	Time from 160° F (70° C) - 4 Hours
Safety Class	Type B
Safety Tests	UL 544
Dimensions	33 in H x 35 in L x 20 in W (85 cm H x 89 cm L x 50 cm W)
Product Weight	135 lbs (61.2 kg)
Shipping Weight	143 lbs (64.9 kg)

Standard Accessories: Includes twenty-four Standard size HotPacs.

SETUP

Remove all of the contents inside the Hydrocollator Heating Unit and then replace the wire rack. Make certain the drain valve is closed before filling the tank with water. The tank should be approximately 3/4 full with packs removed. The tank may be filled from any standard type faucet.

Check the voltage rating on the serial decal plate which is located on the back of the unit. To turn the unit on, simply plug the unit into a 120 Volt~, 60 Hz outlet as indicated on the decal plate. To turn the unit off, simply unplug from outlet. Do not attempt to use direct current. Follow the procedures indicated in the Precautionary Instructions. Do not attempt to use the unit if it is not properly grounded.

OPERATION

The Hydrocollator Heating Unit is simple and easy to operate. The controls are located in the rear, near the bottom of the unit. The thermostat controls the temperature of the water. It is located near the bottom of the unit on the control panel. It has been tested and preset at the factory to normal operating temperature. If further adjustment is necessary, it can be easily accomplished by turning the adjusting screw located on the thermostat. ***Turning the outer screw counterclockwise lowers the temperature, while turning it clockwise raises it.***

NOTE: <u>Do not turn the inner stem under any circumstance! Stem is preset by the manufacturer</u>.

The Hydrocollator Heating units operate through the use of a hydraulic capillary-type thermostat and can be left plugged in and turned on to provide a ready supply of heated HotPacs .

The HotPac rack accommodates different sizes and types of packs.

SS Unit – Includes eight Standard Size packs. Special rack holds two Neck Contour packs.

SS-2 Unit – The unit comes complete with eight standard HotPacs.

E-1 Unit – With the insert in, the rack accommodates four Standard Size packs.

E-2 Unit – The E-2 unit comes complete with two Oversize, three Standard Size packs, and one Neck Contour pack.

M-2 Unit - The M-2 unit comes complete with 12 standard HotPacs.

M-4 Unit - The M-4 comes complete with 24 standard HotPacs.

TROUBLESHOOTING

The following are solutions to minor performance problems. Only qualified personnel should service equipment problems.

Problem	Possible Cause	Possible Solution
Unit plugged in, Water does not get hot	1. Breaker for electric circuit off 2. Thermostat not functioning 3. Heating element burned out	1. Turn breaker on 2. Replace thermostat 3. Replace element
Cloudiness of water	1. Filler from packs is seeping 2. Too long a period between cleanings.	1. Replace packs 2. Drain and clean
Packs too hot	1. Thermostat set too high 2. Thermostat failure	1. Adjust thermostat 2. Replace thermostat
Packs too cool	1. Thermostat set too low 2. Thermostat failure	1. Adjust thermostat 2. Replace thermostat
Unit boils	1. Thermostat failure	1. Replace thermostat
Rust/Discoloration	1. Contact with ferrous material 2. Deposits on inside of tank 3. Too much chlorine in water	1. Remove the ferrous metal item from the unit (staple, paper clip, safety pin, tongs, etc.) and clean thoroughly. Add a dechlorinating agent if local water has high chlorine content. 2. Thoroughly clean tank and remove all deposits. 3. Clean tank and rinse thoroughly. Add a dechlorinating agent if local water has high chlorine content.

Model SS - Standard

Cat. No. – 2202 w/packs

Key*	Part Description	Part No.
1	Lid	22219
2	Lid Rod	22231
3	Pilot Lamp, Clear	22148
4	Power Cord	20568
5	On/Off Switch	23406
7	Drain Valve	21373
8	Element, Heating 120 Volt, 1000 Watt	10630
10	Hydraulic Thermostat	10631
11	Bracket & Bulb Thermostat A/B Assembly (2 each)**	21023
12	Internal Wiring Harness	21031
13	Drain, Copper Tube Part A	21288
14	Handle, Lid Kit***	22171
15	Lid Rod Nuts (2 required)	21737
24	Junction Box (J-Box) Cover	22223
25	Stainless Steel Wire Rack	22232
29	Water Thief	21882
30	Feet, Plastic	75538
31	Hose, Drain	21635
32	Drain, Copper, Part B	21289

* Key numbers refer to Nomenclature Section (pages 5 and 6).

** Used to hold the hydraulic thermostat to the heating element.

*** Includes decorative handle, nut 10-32 acorn brass, screw 10-32x2, red logo decal, and flat plastic washer.

Model SS-2 - Standard

Cat. No. – 2302 w/packs

Key*	Part Description	Part No.
1	Lid	22219
2	Lid Rod	22231
3	Pilot Lamp, Clear	22148
4	Power Cord	20568
5	On/Off Switch	23406
7	DrainValve, Ball - 1/2 in Replacement	21085
8	Element, Heating 120 Volt, 1000 Watt	10630
10	Hydraulic Thermostat	10631
11	Bracket & Bulb Thermostat A/B Assembly (2 each)**	21023
12	Internal Wiring Harness	61579
13	Drain, Copper Tube Part A	21286
14	Handle, Lid Kit***	22171
15	Lid Rod Nuts (2 required)	21737
16	Handle, Side (2)	20237
17	Caster, 3-inch	21259
24	Junction Box (J-Box) Cover	22087
25	Stainless Steel Wire Rack	22259
26	Drain, Hose, Bib	23392
27	Replacement Tank	23385
28	Outer Jacket	22425
29	Water Thief	21882
31	Hose, Drain	21635

* Key numbers refer to Nomenclature Section (pages 5 and 6).

** Used to hold the hydraulic thermostat to the heating element.

*** Includes decorative handle, nut 10-32 acorn brass, screw 10-32x2, red logo decal, and flat plastic washer.

Model E-1 - Standard

Cat. No. – 2102 w/packs

Key*	Part Description	Part No.
1	Lid	21004
2	Lid Rod	22668
3	Pilot Lamp, Clear	22148
4	Power Cord	20568
5	On/Off Switch	23406
8	Element, Heating 120 Volt, 1000 Watt	21007
10	Hydraulic Thermostat	10631
11	Bracket & Bulb Thermostat A/B Assembly (2 each)**	21023
12	Internal Wiring Harness	21031
14	Knob, Lid	21025
15	Lid Rod Nuts (2 required)	21737
21	Handle, Side Kit***	21994
24	Junction Box (J-Box) Cover	21005
25	Stainless Steel Wire Rack	21062

* Key numbers refer to Nomenclature Section (pages 5 and 6).

** Used to hold the hydraulic thermostat to the heating element.

*** Includes E-1 side handle, 10-24x3/8 screw, nylon washer, 10-32 acorn nut, 10-32x1/4 screw, and handle adapter.

Model E-2 - Standard

Cat. No. – 2802 w/packs

Key*	Part Description	Part No.
1	Lid	23457
3	Pilot Lamp, Clear	22148
4	Power Cord	20568
5	On/Off Switch	23406
7	Drain Valve	21373
8	Element, Heating 120 Volt, 1000 Watt	10630
10	Hydraulic Thermostat	10631
11	Bracket & Bulb Thermostat A/B Assembly (2 each)***	21023
12	Internal Wiring Harness	21031
13	Drain, Copper Tube Part A	21288
14	Handle, Lid Kit	20512
24	Junction Box (J-Box) Cover	23460
25	Stainless Steel Wire Rack	22259
29	Water Thief	21882
31	Hose, Drain	21635

* Key numbers refer to Nomenclature Section (pages 5 and 6).

** Used to hold the hydraulic thermostat to the heating element.

*** Includes decorative handle, 1/4-20x1-1/4 screw, and red logo decal.

Model M-2 - Standard

Cat. No. – 2402 w/packs

Key*	Part Description	Part No.
1	Lid	22297
2	Lid Rod	22303
3	Pilot Lamp, Clear	22148
4	Power Cord	20568
5	On/Off Switch	23406
7	Drain Valve, Ball - 1/2 in Replacement	21085
8	Element, Heating 120 Volt, 1000 Watt	10630
10	Hydraulic Thermostat	10631
11	Bracket & Bulb Thermostat A/B Assembly (2 each)**	21023
12	Internal Wiring Harness	61579
13	Drain, Copper Tube Part A	21286
14	Handle, Lid Kit***	22171
15	Lid Rod Nuts (2 required)	21737
16	Handle, Side	20237
17	Caster, 3-inch	21259
24	Junction Box (J-Box) Cover	22087
25	Stainless Steel Wire Rack	22304
26	Drain, Hose, Bib	23392
27	Replacement Tank	56314
28	Outer Jacket	22421
29	Water Thief	21882
31	Hose, Drain	21635

* Key numbers refer to Nomenclature Section (pages 5 and 6)

** Used to hold the hydraulic thermostat to the heating element.

*** Includes decorative handle, nut 10-32 acorn brass, screw 10-32x2, logo decal, and flat plastic washer.

Model M-4 - Standard

Cat. No. – 2502 w/packs

Key*	Part Description	Part No.
1	Lid	22348
2	Lid Rod	22361
3	Pilot Lamp, Clear (Serial # Above 5840)	22148
	Lamp, Ind (Serial # Below 2550)	21665
	Lamp, Pilot Light (Serial # Above 2549)	20042
4	Power Cord	20568
5	On/Off Switch	23406
7	Drain Valve, Ball - 1/2 in Replacement	21085
8	Heating Element M-4, 120 Volt, 1500 Watt	22267
10	Hydraulic Thermostat	10631
11	Bracket & Bulb Thermostat A/B Assembly (2 each)**	21023
12	Internal Wiring Harness	21617
13	Drain, Copper Tube Part A	21286
14	Handle, Lid Kit***	22171
15	Lid Rod Nuts (2 required)	21737
16	Side Handle (Serial # Above 5149)	20237
17	Caster, 3-inch	21260
20	Thermostat Low Water Kit**** (Overtemp Thermostat)	20548
23	Pilot Lamp, Red	22149
24	Junction Box (J-Box) Cover	22360
25	Stainless Steel Wire Rack	22374
26	Drain, Hose, Bib	23392
27	Replacement Tank	22343
28	Outer Jacket	23384
29	Water Thief	21882
31	Hose, Drain	21635
33	Bracket, Element Support (2 each)	22356

* Key numbers refer to Nomenclature Section (pages 5 and 6)

** Used to hold the hydraulic thermostat and overtemp thermostat to the heating element.

*** Includes decorative handle, nut 10-32 acorn brass, screw 10-32x2, red logo decal, and flat plastic washer.

**** Includes gasket thermostat, nut 1/2-20 brass, and overtemp thermostat.

MAINTENANCE

The Hydrocollator Heating Unit is equipped with an immersion type heating element and a hydraulic capillary-type thermostat which evenly maintains the HotPac temperature in the water and provides a ready supply of heated packs. It is critical to maintain the water level over the top of the HotPac to avoid damage to the heating element, the stainless steel, or the HotPac. Water is constantly lost during operation due to evaporation. Therefore, it is essential that water be added daily. The tank should also be drained and cleaned systematically, at minimum intervals of every two weeks.

Always unplug the unit from the power source when emptying or cleaning the unit. Drain the unit by the drain valve located at the bottom rear of the unit. Either move the unit to a floor drain or attach the extension hose to it when draining. (E-1 units have no drain and can be emptied by turning unit upside down.)

⚠ WARNING

- Chattanooga Group does not recommend the Hydrocollator Heating Unit be moved while filled with heated water. Tipping over could result in a burn to the user or others. If the Hydrocollator must be moved while filled, **exercise extreme caution!** It is recommended to allow the water to cool below 120° F (49° C) before moving the unit.
- Always unplug the Hydrocollator Heating Unit from the power source before attempting to empty water from unit.

The Hydrocollator Heating Unit is made of high quality stainless steel that, with proper care and maintenance, could easily last a lifetime. Improper care could allow the stainless steel to wear prematurely.

Follow these simple steps to ensure that the Hydrocollator Heating Unit remains in excellent condition.

1. Excessive chlorine can be detrimental to the stainless steel in the Hydrocollator Heating Unit . No bleach or any cleaner with high chlorine content should be used under any circumstance.
2. Clean regularly for optimal service and operation.
   NOTE: Failure to maintain the unit (including regular cleaning) will void the warranty.
3. Fill daily with water. Water is constantly lost during operation due to evaporation.
4. Chlorine in regular tap water may be present in high enough concentrations to damage the unit. If you suspect high levels of chlorine are detected in the Hydrocollator Heating Unit, the addition of a dechlorinator is recommended.
5. Certain additives (such as herbal teas, essential oils, etc.) will damage the HotPacs and components of the heating unit, including the stainless steel. The Hydrocollator Heating Unit was designed to heat water and HotPacs only. The addition of any such foreign substance (except dechlorinator) to the water in the unit will void the warranty.
6. Inspect heating element for pitting and other visible damage during regular cleaning intervals.
7. Inspect power cord for wear, fraying, and other visible damage during regular cleaning intervals.

To avoid potential for rusting:

1. **Do not** use bleach or cleaners with high chlorine content.
2. **Do not** use paper clips, safety pins, staples, coat hangers, etc., in, on, or near the unit.
3. **Do not** clean the unit with carbon steel wool or a carbon steel brush. Use only soft cloth, Scotch-Brite™ type scouring pads of green, blue, or white abrasiveness, or stainless steel wool if absolutely necessary.
4. **Do not** use abrasive cleaners which tend to disturb the grain in the finish, especially on the exterior of the unit. For exterior cleaning, use only non-abrasive stainless steel polish.
5. Water level is critical: Add water daily, if necessary, to keep unit full.
6. Regularly clean and drain the tank **(every two weeks)**. Failure to properly maintain the unit will cause premature wear and will void the warranty.
7. Remove all deposits from interior surfaces and parts. The deposits are concentrations of minerals that will allow rusting to begin. If allowed to accumulate on the heating element, these deposits will lower the efficiency of the element and increase the power consumption of the unit. Exercise extreme care if cleaning the element or thermostat(s). These components can be easily damaged without proper care or caution.
8. If you suspect that you have "hard water", you may need to change the water and clean the unit more frequently. Salt deposits are an indication of hard water that will eventually cause rust.

Cleaning Tips

1. The interior of the unit should be cleaned, at least every two weeks, using a low abrasive bathroom cleaner with a soft cloth or green, blue, or white Scotch-Brite™ type scouring pad. Stainless steel wool may be used if necessary, but not regular carbon steel wool. Check for low or no chlorine content in your cleaner and make sure that the residue is thoroughly rinsed away with water.
2. A strong solution of vinegar and water may be used to dissolve away deposits, which then must be thoroughly rinsed away. Results may vary.
3. For exterior cleaning, use stainless steel polish and a soft cloth only. Numerous industrial stainless steel polishes are available from various supply companies. Use of any cleaner except stainless steel polish on the exterior of the unit is not recommended. Abrasive cleaners and scouring pads can damage the finish of the unit.

Care of HotPacs

Always return the Hydrocollator HotPac to the hot water of the heating unit after each treatment. There it is heated, kept clean, and ready for immediate use. The HotPac may be boiled; however, this hastens the deterioration of the pack. The pack may also be cleaned by scrubbing the pack with soap and water. The simplified method of keeping the pack clean is to keep it immersed in water.

The Hydrocollator HotPac, under constant daily use, should have a useful life of at least one year. When the pack begins to wear out, the filler oozes and leaks through the fabric of the cloth; sections of the pack appear to be loose and empty and will not retain heat properly. The pack should be replaced when it reaches this state. Original replacement Hydrocollator HotPacs may be ordered from an authorized Chattanooga Group dealer.

NOTE: If HotPacs are to be stored for extended periods, they may be placed - while wet - in plastic bags and stored in a freezer.

WARRANTY

Chattanooga Group, a division of Encore Medical, L.P., ("Company") warrants that the Hydrocollator Models SS, SS-2, E-1, E-2, M-2, and M-4 Heating Units ("Products") are free of defects in material and workmanship. This warranty shall remain in effect for one year (12 months) from the date of original consumer purchase. If these Products fail to function during the one year warranty period due to a defect in material or workmanship, at the Company's option, the Company or the selling dealer will repair or replace this Product without charge within a period of thirty days from the date on which the Product is returned to the Company or the dealer.

All repairs to the Product must be performed by a service center authorized by the Company. Any modifications or repairs performed by unauthorized centers or groups will void this warranty.

To participate in warranty coverage, this Product's warranty registration card (included with Product) must be filled out and returned to the Company by the original owner within ten (10) business days of purchase.

This Warranty Does Not Cover:

- Replacement parts or labor furnished by anyone other than the Company, the selling dealer or a certified Company service agent.
- Defects or damage caused by labor furnished by someone other than Company, the selling dealer or a certified Company service agent.
- Any malfunction or failure in the Product caused by product misuse, including, but not limited to, the failure to provide reasonable and necessary maintenance or any use that is inconsistent with the Product User Manual.

COMPANY SHALL NOT BE LIABLE IN ANY EVENT FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

To obtain service from the Company or the selling dealer under this warranty:

1. A written claim must be made within the warranty period to the Company or the selling dealer. Written claims made to the Company should be sent to:

   4717 Adams Road
   P.O. Box 489
   Hixson, TN 37343 USA
   (800) 592-7329
   (423) 870-2281 USA
   (423) 875-5497 USA FAX

2. The Product must be returned to the Company or the selling dealer by the owner.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

The Company does not authorize any person or representative to create for it any other obligation or liability in connection with the sale of the Product. Any representation or agreement not contained in the warranty shall be void and of no effect.

THE FOREGOING WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

ISO 13485 CERTIFIED

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